



A.D. 1859, *9th August.* N° 1848.

S P E C I F I C A T I O N

OF

JOSEPH WAITE.

PREPARATION OF INFUSIONS, &c.

LONDON:

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A.D. 1859, 9th AUGUST. N° 1848.

Preparation of Infusions, &c.

LETTERS PATENT to Joseph Waite, of Cheltenham, in the County of Gloucester, Chemist, for the Invention of “**IMPROVEMENTS IN MAKING INFUSIONS FOR PHARMACEUTICAL PURPOSES, WHICH IMPROVEMENTS ARE ALSO APPLICABLE TO OTHER PURPOSES OF A SIMILAR NATURE.**”

Sealed the 7th February 1860, and dated the 9th August 1859.

PROVISIONAL SPECIFICATION left by the said Joseph Waite at the Office of the Commissioners of Patents, with his Petition, on the 9th August 1859.

I, JOSEPH WAITE, of Cheltenham, in the County of Gloucester, Chemist,
5 do hereby declare the nature of the said Invention for “**IMPROVEMENTS IN MAKING INFUSIONS FOR PHARMACEUTICAL PURPOSES, WHICH IMPROVEMENTS ARE ALSO APPLICABLE TO OTHER PURPOSES OF A SIMILAR NATURE,**” to be as follows:—

This Invention relates to an improved system or mode of making infusions of all kinds, whether hot or cold, and consists essentially in making infusions
10 under pressure, the water employed being forced by means of a force pump into and among or through the ingredients from which the infusion is to be made. These ingredients are for this purpose contained within a suitably-sized vessel or chamber in connection with the forcing pump or apparatus. This system of working under pressure is equally applicable to the preparation
20 of tinctures, vegetable essences.

Waite's Improvements in the Preparation of Infusions, &c.

SPECIFICATION in pursuance of the conditions of the Letters Patent, filed by the said Joseph Waite in the Great Seal Patent Office on the 8th February 1860.

TO ALL TO WHOM THESE PRESENTS SHALL COME, I, JOSEPH WAITE, of Cheltenham, in the County of Gloucester, Chemist, send greeting. 5

WHEREAS Her most Excellent Majesty Queen Victoria, by Her Letters Patent, bearing date the Ninth day of August, in the year of our Lord One thousand eight hundred and fifty-nine, in the twenty-third year of Her reign, did, for Herself, Her heirs and successors, give and grant unto me, the said Joseph Waite, Her special license that I, the said Joseph Waite, my 10 executors, administrators, and assigns, or such others as I, the said Joseph Waite, my executors, administrators, or assigns, should at any time agree with, and no others, from time to time and at all times thereafter during the term therein expressed, should and lawfully might make, use, exercise, and vend, within the United Kingdom of Great Britain and Ireland, the 15 Channel Islands, and Isle of Man, an Invention for “**IMPROVEMENTS IN MAKING INFUSIONS FOR PHARMACEUTICAL PURPOSES, WHICH IMPROVEMENTS ARE ALSO APPLICABLE TO OTHER PURPOSES OF A SIMILAR NATURE,**” upon the condition (amongst others) that I, the said Joseph Waite, by an instrument in writing under my hand and seal, should particularly describe and ascertain 20 the nature of the said Invention, and in what manner the same was to be performed, and cause the same to be filed in the Great Seal Patent Office within six calendar months next and immediately after the date of the said Letters Patent.

NOW KNOW YE, that I, the said Joseph Waite, do hereby declare the 25 nature of my said Invention, and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement, reference being had to the accompanying Drawings, and to the letters and figures marked thereon, that is to say, :—

My said Invention relates to an improved system or mode of making 30 infusions of all kinds, whether hot or cold, and consists essentially in making infusions under pressure, the water employed being forced by means of a force pump into and among or through the ingredients from which the infusion is to be made. These ingredients are for this purpose contained within a suitably-sized vessel or chamber in connection with the forcing pump or 35 apparatus. This system of working under pressure from a force pump is equally applicable to the preparation of tinctures and vegetable essences.

Waite's Improvements in the Preparation of Infusions, &c.

And in order that my said Invention may be properly understood, I shall now proceed more particularly to describe the same, and for that purpose I shall refer to the accompanying Drawing, which represents a vertical section of my improved apparatus for making infusions, tinctures, essences,
5 or extracts.

A is the barrel of a force pump, provided with a tight-fitting piston B, worked by the lever handle C, shewn partly broken away in the Drawing. The lower end of this pump communicates, by means of a side pipe D, with a vessel E containing the water, spirit, or other liquid to be used in preparing
10 the infusion or tincture. This pipe is provided with a foot valve F, and also with an ordinary stop-cock G. The bottom of the pump communicates also, by means of the nozzle H, with the cylindrical vessel or chamber I, connected thereto by a union or other suitable joint J, and provided with a tight-fitting screwed cap K. A nozzle L is formed on the bottom of this chamber, and
15 is screwed into the top of the pipe M, which also dips into the vessel E, and is furnished with a stop-cock N. The entire apparatus may be secured to a table or other support by means of screws passed through the wide flange or plate O, O, formed on the bottom of the pump barrel. In preparing an infusion by this apparatus, I first unscrew the union joint J, and remove the
20 cover or cap K of the chamber I, into which I introduce the ingredients from which the infusion is to be prepared; I then screw on the cap again tightly, and connect the chamber by means of the union joint coupling with the pump A. Boiling or cold water, as the case may be, or medicated solutions, such, for example, as alkaline solutions, should now be pumped up through
25 the pipe D, which is then closed by turning the stop-cock G. The water or medicated solution thus contained within the pump barrel is now forced downwards, by depressing the piston, into and through the ingredients contained in the chamber I, and if boiling water be used, I allow it to remain there a few minutes by closing the cock N. This cock having been again
30 opened, I force the water, by further depressing the piston, through the ingredients into the vessel E, into which the pipe D also dips. The cock N is again closed, and the cock G in the pipe D opened, and by elevating the piston again I draw the same liquid, which has now become a comparatively weak infusion, into the pump again, and again force it through the ingre-
35 dients in the chamber I, continuing to repeat the operation until the infusion is of the proper strength, or until all the virtue is extracted from the ingredients, which will generally occur in the space of from six to eight minutes. It will be found advantageous to have several chambers I of different

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sizes, but all fitting the one pump separately, so that a longer or shorter chamber may be used according to the quantity of ingredients to be operated upon.

I may here observe that I am aware that infusions or extracts have been proposed to be made by forcing liquid upwards through the ingredients by 5 means of the pressure due to the weight of a column of the liquid employed, and therefore I lay no claim to the absolute use of hydrostatic pressure in making infusions; but what I do claim as novel and original, and as the Invention secured to me by the herein-before in part recited Letters Patent, is,—

10

First, the system or mode of making infusions, tinctures, extracts, and essences, wherein the liquid employed is forced, by the aid of a force pump or mechanical pressure, through the ingredients, as herein-before described.

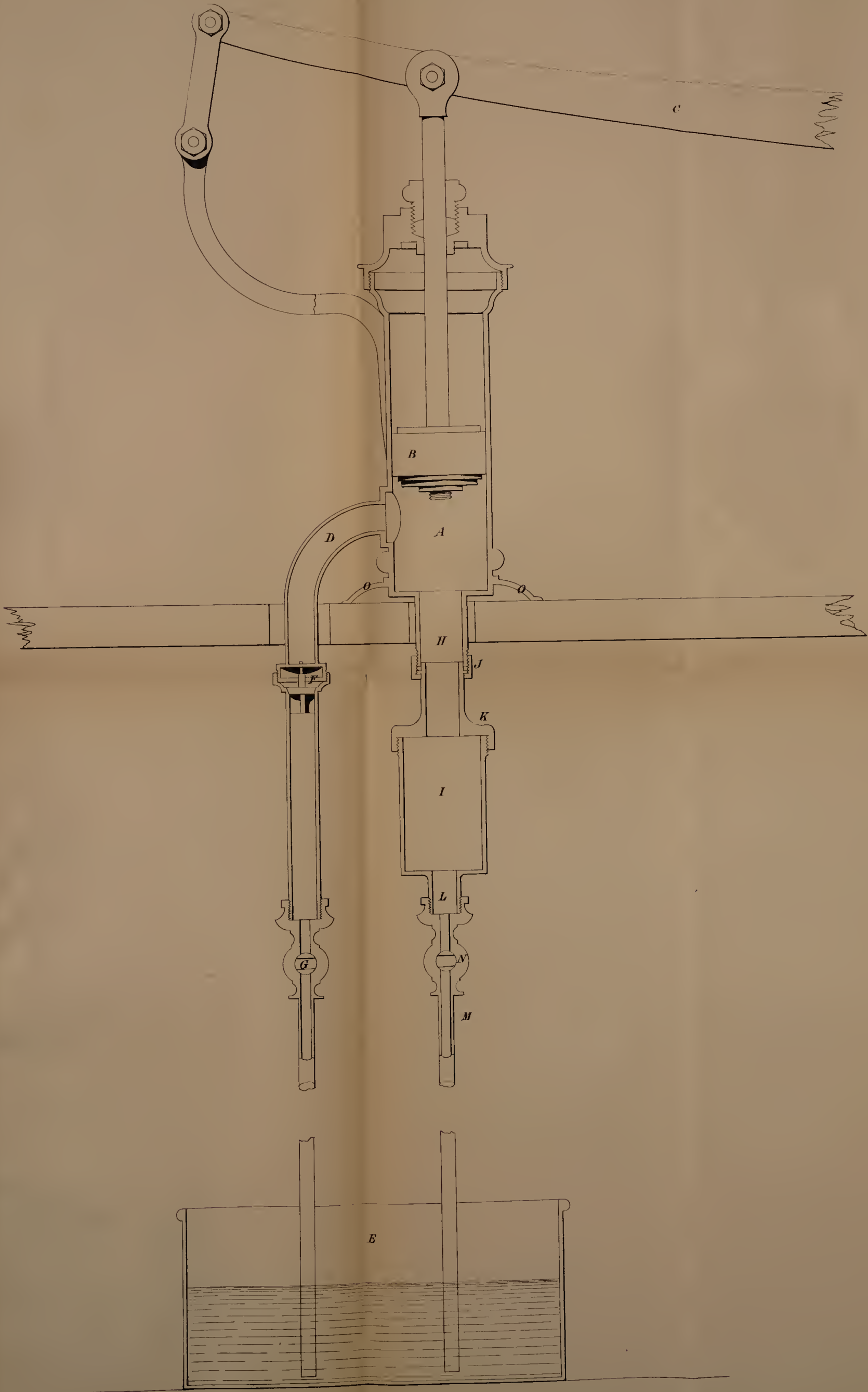
Second, the peculiar construction and arrangement of apparatus for making infusions, tinctures, extracts, or essences as herein-before described and illus- 15 trated by my Drawing.

In witness whereof, I, the said Joseph Waite, have hereunto set my hand and seal, this 27th day of January, One thousand eight hundred and sixty.

JOSEPH WAITE. (L.S.) 20

LONDON:

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Printers to the Queen's most Excellent Majesty. 1860.



The filled drawing is partly colored .

Drawn in Stone by Malby & Sons

